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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/036,184

12/26/2001

Toshihisa Ishida

56832 (71004)

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21874 7590 09/03/2003

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EXAMINER

RODEE, CHRISTOPHER D

ART UNIT

PAPER NUMBER

1756

DATE MAILED: 09/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/036,184	Applicant(s) ISHIDA ET AL.	
	Examiner Christopher D RoDee	Art Unit 1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi *et al.* in US Patent 5,256,512.

This rejection was set forth in the last Office action. The amendment to claim 1 addresses matters of form set forth in the last Office action, page 2. The amendment to claim 8 incorporates each of the limitations from claims 1-3 and presents this claim as a new independent claim. This combination is newly presented in the response. However, Kobayashi reasonably suggests the invention described in amended claim 8 based on the combined reasoning specifically set forth for claims 2 and 3 in the last Office action on pages 5 and 6. Specifically, the artisan would recognize from the disclosure that the size distribution of the toner is a result effecting variable, particularly for particles at and below 6.35 μm (see col. 4, l. 7 - col. 5, l. 35), and would have found it obvious to minimize the particle size distribution and the number of particles distant from the average size so that minimal particles are present at the extremes of the size distribution, such as below 6.35 μm . This would minimize the number of particles in each of the ranges of 4.00 μm to 5.04 μm and 5.04 μm to 6.35 μm , as well as the variation coefficient of the toner. The Examiner notes that applicants have not challenged the Official Notice taken in the last Office action concerning the sizes measured by the Coulter Counter (last Office action, p. 6). Thus the art of record is pertinent to claim 8 for the reasons of record and as summarized above.

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Applicants traverse the rejection of record because Kobayashi exemplifies toners having average particle diameters larger than those permitted in the instant claims (response p. 6).

Applicants also take the position that Kobayashi teaches higher levels of toner having sizes below 6.35 μm than those permitted by the claimed invention. Based on this disclosure applicants conclude that Kobayashi does not teach or suggest the characteristics of the instant invention and would not suggest the performance improvements in the applications of the instant invention.

The Examiner has given careful consideration to applicants' remarks but is unable to agree that Kobayashi does not suggest the claimed electrophotographic developer. Applicants are correct that Kobayashi exemplifies toners having average particle sizes larger than those permitted by the instant claims (i.e., the claims specify a size of from 8 to 11.5 μm while exemplified toners have sizes at, for example, 12.1 μm). However, Kobayashi is not limited to its preferred teachings. Kobayashi is pertinent for all of its teachings, including non-preferred embodiments. See *In re Heck*, 216 USPQ 1038. Kobayashi teaches a narrow range of average toner particle sizes, specifically from 11.0 μm to 14.0 μm (see last Office action, p. 4, top). Given this narrow range and the specifically contemplated lower limit of 11.0 μm , the artisan would have ample motivation to use toner particle sizes at or near the lower limit, while still within the scope of the reference's teachings.

With respect to those particles having sizes at or below 6.35 μm , the instant claims require this particle size range to be present in amounts of from 20 number % or less.

Kobayashi specifically teaches that particles having sizes at or below 6.35 μm to be present in an amount of 20 % by number or less (see last Office action, p. 4, top). The exemplified toners specifically have sizes in this range of 19.7 number %, 13.1 number %, and 16.4 number % (reference Table 3, col. 24, bottom). The reference clearly discloses those particles sizes

required by the instant claims because both the general teachings and exemplifications have toners with sizes at or below $6.35\text{ }\mu\text{m}$ to be present in an amount of 20 % by number or less.

The Examiner cannot agree with applicants' remarks concerning this size feature because Kobayashi specifically meets this requirement.

The artisan would have ample motivation to produce developers with toners and carriers having sizes in the ranges delineated by the instant claims. Although Kobayashi may not be specifically concerned with producing a developer having the utility specified in the instant specification (e.g., in the intended use of the claims), the instant claims are not limited to being fed from a developer carrier to develop an electrostatic latent image on an electrostatically charged-image holder, where the developed image is transferred onto a transferring material, and where it is used for the electrostatically charged-image holder described above having a radius of curvature of 18 mm or less in a development effective range. The claims are limited to the developer and the applied art reasonably suggests a developer having each of the characteristics positively claimed.

Applicants are not understood to disagree with the Examiner's position that Kobayashi's developer has a carrier with the size and compositional requirements of the instant claims.

The Examiner wishes to clarify that the first sentence in the description of this rejection as previously set forth (i.e., "Kobayashi was described above with respect to a comparative example.") referred to a formulated but never applied anticipation rejection of Kobayashi.

Comparative Example 1 discloses a black toner as claimed but upon further review it was apparent that the reference did not identically disclose the claimed carrier with this comparative toner. This vestigial statement in the first sentence of the rejection should be disregarded.

The rejection is proper and remains applicable because Kobayashi fairly teaches and suggests a developer having the characteristics specified in the instant claims.

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C nclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D RoDee whose telephone number is 703 308-2465. The examiner can normally be reached on most weekdays from 6 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 703 308-2464. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and 703 872-9311 for After-Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0661.

cdr
September 1, 2003

**CHRISTOPHER RODEE
PRIMARY EXAMINER**